# Guidelines for Conducting Biological Surveys for Projects Requiring a County Permit

**County of San Luis Obispo**
**Planning and Building Department**
**December 11, 2007**

The following guidelines are intended to provide biological consultants with information on the necessary steps to conduct biological surveys for projects that require a County permit. These guidelines apply to most biological surveys required by County. Additional resources for biological consultants include the County Guidelines for Preparation of Biological Reports; Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants, prepared by the U.S. Fish and Wildlife Service (USFWS) January 2000; Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities, Prepared by the California Department of Fish and Game (CDFG) Revised May 8, 2000; and CDFG and USFWS protocol surveys and guidelines for specific species. These documents are available on the County website at http://www.slocounty.ca.gov/planning/environmental/Biological_Consultant_Information.htm.

1. After being contacted by applicant to conduct field surveys, determine if you have the necessary knowledge and experience to conduct the work. If you do not, refer the applicant to a biologist that has the appropriate experience. If you do have the necessary knowledge and experience and are not on the County's list of qualified consultants, you must submit your qualification information to the County for approval **BEFORE** conducting any field studies.

2. If you are retained by an applicant to conduct biological surveys, obtain from the applicant the Assessor's Parcel Number (APN), a detailed project description, County-assigned project number, and the most recent set of site (project) plans.

3. Prior to a site visit, conduct a nine-quadrangle (7.5 minute/24,000 scale) search in the California Natural Diversity Database (CNDDB) for sensitive plant and animal species. The nine quadrangles should include the quadrangle including the project site and the eight surrounding quadrangles. The CNDDB search is the starting point to determine the potentially occurring sensitive species at the project site but is not comprehensive since it only includes sightings that have been reported to the CNDDB. Use your personal biological expertise, results from previous biological reports, museum records, etc. to identify additional potential sensitive species for the project site.

4. Based on the information collected in step 3, prepare a list of potentially-occurring sensitive species in table format that includes the following:
    a. Species common name

b. Species scientific name
c. Species special status (federal, state, CNPS, CDFG)
d. Habitat requirements/vegetation associations
e. Time of year when species is present, flowering, or identifiable, which determines the time of year when surveys must be conducted to identify those species.
f. Assessment of potential for species to be present on site (e.g. red-legged frog is unlikely to occur because no water bodies or streams are located on site and no permanent water bodies are located within one mile of project site," or "red-legged frog is likely to occur because breeding habitat is present onsite in the creek and red-legged frogs sightings have occurred in the creek within ¼ mile of the project site."). When sensitive wildlife is being considered, the potential for the site to provide important wildlife or migration corridors.

5. Using the table prepared in step 4, schedule field surveys to coincide with the time of year species are present, flowering, or identifiable in order to identify potentially occurring sensitive species. Please note that more than one survey may be needed to assess occurrence potential for all species on the list.

6. Coordinate with the applicant about the need and timing for field surveys and the possible need for multiple surveys at different times of year.

7. Meet with applicant at the project site. Have the applicant describe the project and show you the project site boundaries and impact area. Question the applicant about the proposed project, alternatives being considered, the location of leach fields, wells, utility lines, and any off-site improvements. Ask the applicant about Cal Fire requirements for road improvements and defensible space. For forested areas, or areas with “moderate” to “high fuel” vegetation, one should assume that all areas within 100 feet of proposed structures and 10 feet from existing/proposed roads will receive a Cal Fire recommendation for heavy “modification” or removal of such vegetation. This assumption should be included in all biological assessments when such conditions exist. Examine the entire project site using maps, aerial photographs and site plans. Take notes on the physiographic setting, topography, drainage patterns, rock outcrops, cliffs, water bodies, creeks, etc., on-site and adjacent land uses, and existing conditions.

Vegetation classification can be done during this field visit. Make note of habitat identified by the state as sensitive or in serious decline (e.g., maritime chaparral, etc.). Map the vegetation types using aerial photographs, site plans, and/or GPS. Identify location and condition of creeks, rivers, drainage channels, swales, wetlands, vernal pools, depressions, serpentine rock formations, and other features. Assess the potential for the site to provide habitat for the species on the species list.

8. Obtain necessary state and federal permits, collecting permits, and/or Memorandums of Understanding (MOUs) from CDFG or verify that your permits and MOUs are valid and up-to-date.

9. At the time of botanical field survey(s), visit known reference populations of target species to verify their flowering periods. This information will help to support any conclusions that the species does not occur on the project site if they are not observed during the field surveys. Visiting reference populations may be appropriate for other animal species, if they are migratory, or have a particular active/dormant cycle, to determine if they are present/active.

10. Conduct field surveys in all habitats as per standard biological techniques and recommended federal and state protocols (as applicable) for target species. The County recommends that the entire parcel be surveyed for projects that will encompass the entire parcel, and for small projects on small parcels (i.e. less than 10 acres). For small projects located on larger parcels encompassing hundreds of acres, it may not be necessary to survey the entire site, but at a minimum, the surveys should include the proposed project area, road improvements, leach fields, utility lines, and off-site improvements and appropriate buffer areas, including any areas that have the potential to be the subject of indirect impacts (such as impacts from occupation, such as pets, noise and/or lighting).

The biologist should identify all habitats/vegetation associations on the entire parcel, regardless of the project and parcel size. If sensitive resources are found on the project site which may be impacted by the proposed project, a larger area shall be surveyed, to determine the extent of impacts to specific resources on the project site, to identify alternate project locations and/or to identify areas to which it would be appropriate to direct compensatory mitigation. If the entire parcel is not surveyed, the biologist should be aware that frequently project plans are changed either by the applicant, the County, or the approving hearing body. If the initial survey(s) do not include the new project areas, it could result in the need for additional surveys and delays to the project.

If a project site has been disturbed or denuded prior to the field survey, it is not possible for the County to determine possible impacts to sensitive resources that may have been present. These situations often require additional field surveys after the site is allowed to re-vegetate.

In some cases, the applicant has conducted work without County permits, resulting in a code enforcement violation. The County may request that the applicant hire a biologist to assess the existing resources and the potential for sensitive resources to have been impacted by the activities. In these cases, the biologist should use their expertise and available resources to make a professional assessment of what was present on the site before the activity

occurred. If sensitive plants are located adjacent to the area that was impacted, the species may also have occurred in the impact area. An assessment of the potential impact population would then be required.

11. Accurately map the locations of sensitive habitats and species.

12. Record all plant and animal species observed on or near the project site. Identify the species to the taxonomic level necessary to determine its rarity and status.

13. Take photographs of existing conditions, habitats, vegetation associations, sensitive resources, unique features, etc.

14. Complete the table of potentially occurring species with the survey results. (e.g. "species not found on project site during appropriately timed surveys" or "species identified on project site in wetland habitat.") Do not merely conclude that species does not occur on project site due to lack of habitat without conducting the appropriate surveys.

15. Assess the potential of direct and indirect impacts to biological resources from project activities. Include impacts from the project, leach fields, wells, utility lines, Cal Fire defensible space requirements, road improvements, etc. Identify potential take of federal or state listed species which would require consultation with USFWS and/or CDFG.

16. Submit survey results for habitat assessments and/or protocol surveys for listed species to CDFG/USFWS, as appropriate, and send a copy of the report to the County Environmental and Resource Management Division.

17. Recommend mitigation measures to minimize impacts to the resources. Coordinate with the applicant about the survey results and your recommendations.

18. Prepare California Natural Diversity Database (CNDDB) forms for sensitive species sightings.

19. Prepare the biological report as per the County's Guidelines for Preparation of Biological Reports.

20. Submit one copy of the biological report to the applicant and three copies of the report to the County. Indicate in the report if the report is a preliminary report and will be amended after additional surveys are conducted.

21. If the County requires additional information, submit the required information as soon as possible to prevent project delays. Include the Assessor's

Parcel Number (APN) and County-assigned project number on any additional information that is submitted.

**Contact the Environmental and Resource Management Division** at (805) 781-5010 if you have questions about the biological report or survey requirements.